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GRAPHICS, INC., MATROX INTERNATIONAL
8 CORP., MATROX TECH, INC., and
AEROFLEX COLORADO SPRINGS, INC.

9
10 UNITED STATES DISTRICT COURT
11 NORTHERN DISTRICT OF CALIFORNIA
12 SAN FRANCISCO DIVISION

13 RICOH COMPANY, LTD.,

14 Plaintiff,

15 vs.

16 AEROFLEX INCORPORATED, AMI
SEMICONDUCTOR, INC., MATROX
17 ELECTRONIC SYSTEMS LTD., MATROX
GRAPHICS INC., MATROX
INTERNATIONAL CORP., MATROX TECH,
18 INC., AND AEROFLEX COLORADO
SPRINGS, INC.

19 Defendants.
20
21
22

23 SYNOPSYS, INC.,

24 Plaintiff,

25 vs.

26 RICOH COMPANY, LTD.,

27 Defendant.
28

Case No. C03-04669 MJJ (EMC)

Case No. C03-02289 MJJ (EMC)

**REPLY MEMORANDUM IN SUPPORT OF
MOTION FOR SUMMARY JUDGMENT OF
INVALIDITY OF U.S. PATENT NO.
4,922,432 FOR VIOLATION OF 35 U.S.C. §
102(f), OR, IN THE ALTERNATIVE, TO
DISMISS FOR FAILURE TO JOIN ALL
CO-OWNERS AS PLAINTIFFS**

[Summary Judgment Motion No. 3]

Date: September 26, 2006
Time: 9:30 a.m.
Courtroom: 11, 19th Floor
Judge: Martin J. Jenkins

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1 I. INTRODUCTION

2 Ricoh's opposition confirms the absence of any disputed issue of material fact that Simon Foo
3 contributed in a significant manner to the conception of the invention claimed in the '432 patent and
4 is thus a joint inventor of the '432 patent. Indeed, Ricoh acknowledges that Dr. Foo collaborated with
5 Dr. Kobayashi for years regarding computer aided design of VLSI chips:

- 6 • Dr. Kobayashi was Dr. Foo's advisor for his master's thesis. Opp. at 4:3, 17:4-5. This thesis describes the use of a relational database system to manage very large
7 scale integration designs. Opp. at 17:3-4. Ricoh admits that Dr. Foo's master's thesis is Exhibit 66 to the Brothers Declaration.
- 8 • Dr. Kobayashi and Dr. Foo co-authored several published papers in 1986. Opp. at 4:4. One of these papers, titled "A Framework for Managing VLSI CAD Data,"
9 "discusses a frame based approach for managing VLSI CAD data." Opp. at 4:6-7. The other, titled "A Knowledge Based System for VLSI module selection," discusses
10 a program called NEPTUNE, which is "a system that selects VLSI modules, and based on domain specific knowledge and heuristic rules, helps find optimized
11 solutions." Opp. at 4:19-22. "These articles describe systems that use expert knowledge in the selection of [] functional modules."¹ Opp. at 16:11-12. Ricoh
12 admits that the co-authored papers are Exhibits 67-68 to the Brothers Declaration.
- 13 • "Neptune is listed as one of the names of the program module for cell selection that was part of the contract between ICC and Ricoh for the joint development of the
14 Knowledge based Silicon Compiler." Opp. at 18:1-3. In the contract, Dr. Foo is listed as one of the two program designers for Neptune. Opp. at 18:3-4.

15
16 These undisputed facts are the only facts regarding Dr. Foo's contribution necessary to show
17 that Simon Foo is an unnamed joint inventor of the '432 patent, making the '432 patent invalid under
18 § 102(f). As explained in the moving papers (and agreed upon by Ricoh in its opposition), a joint
19 inventor is someone who makes a "contribution to the conception of the claimed invention that is not
20 insignificant in quality, when that contribution is measured against the dimension of the full
21 invention." Opp. at 10:9-11, *quoting Eli Lilly & Co.*, 376 F.3d at 1358. The invention of the '432
22 patent, as described in Claim 13, requires, among other things, a set of stored hardware cells (claim
23 element B), an expert system knowledge base containing rules for selecting hardware cells (claim
24 element C), and an actual selection of hardware cells based upon the rules (claim element F). Motion
25 at 6:25-7:12. Dr. Foo's thesis describes storing hardware cells in a frame-based database, as does the

26
27 ¹ Although Ricoh claims that these papers only disclose technology independent modules, the papers themselves show
28 that they use technology dependent modules, the same as the patent. Regardless the papers show the use of expert knowledge to select modules, and this is enough to show co-inventorship.

1 FAME paper — exactly what is required by claim element B, and as described below with almost
2 identical characteristics to the hardware cells described in Column 9 of the patent. The NEPTUNE
3 paper describes, in detail, a system developed by Dr. Foo and Dr. Kobayashi for selecting hardware
4 cells from the frame-based database described in the FAME paper and Dr. Foo's thesis using rules
5 stored in an expert system knowledge base — claim elements C and F. Further, this NEPTUNE
6 system is listed in the ICC/Ricoh contract as a key portion of the KBSC system jointly developed by
7 ICC and Ricoh, and Dr. Foo is listed as one of the designers of that system. Thus, the undisputed
8 facts show that Dr. Foo, then a USC graduate student and multi-year collaborator with Dr. Kobayashi,
9 contributed to the conception of significant portions of the invention claimed in the '432 patent —
10 specifically, each element of the claims (or, at least, a significant portion of those elements) that do
11 not deal with architecture independent actions and conditions — through his thesis, co-authored
12 papers, and development of the NEPTUNE system. Under the agreed-upon law of joint inventorship,
13 Dr. Foo is thus an unnamed joint inventor of the '432 patent, and the failure of the named inventors to
14 include Dr. Foo on the patent invalidates the patent.

15 Because Ricoh does not and cannot dispute these facts or the analysis, its defense consists
16 solely of a series of straw men that are completely irrelevant for purposes of this motion. These
17 irrelevant issues are (1) Dr. Foo is not the *sole* inventor of the '432 patent; (2) the *only* inventive
18 aspect of the '432 patent is that it is a unique combination of elements found in the prior art; (3) Dr.
19 Foo is a paid Howrey consultant; (4) Defendants do not offer any expert testimony in support of their
20 motion; and (5) Dr. Foo's testimony is uncorroborated by admissible evidence. Furthermore, Ricoh
21 argues, without any factual support, that Dr. Foo was an employee of ICC and thus assigned any
22 patent rights to ICC. As explained below, none of these issues create a material issue of fact for
23 purposes of this motion. Dr. Foo should be adjudged a joint inventor of the '432 patent; further, the
24 case must be dismissed for failure to join all co-owners of the patent, even if Ricoh were to obtain
25 correction of inventorship.

II. ARGUMENT

A. Dr. Foo is a *joint* inventor of the '432 patent, even if he is not the *sole* inventor.

Ricoh's first straw man is its continual suggestion that, to prevail on this motion, Defendants must demonstrate that Dr. Foo is the *sole* inventor of the '432 patent (or at least Claim 13). *See, e.g.*, Opp. at 1:12-14 ("To prevail upon their motion for summary judgment under 102(f), defendants must prove by clear and convincing evidence that Mr. Foo is the inventor of claim 13. . . ."); 16:10-11 ("Any reliance by Mr. Foo's [*sic*] on the two co-authored papers to substantiate that he invented the invention of the '432 patent is unfounded."). But this is not Defendants' position on this motion — this motion is premised on Dr. Foo being a *joint* inventor of the '432 patent, pursuant to 35 U.S.C. § 116.²

Ricoh does briefly touch on the law of joint inventorship in its legal section. *See* Opp. at 10:9-15, quoting *Eli Lilly & Co. v. Aradigm Corp.*, 376 F.3d 1352 (Fed. Cir. 2004). *Eli Lilly* holds (as do the cases cited by Defendants in their opening brief) that "a person not listed on a patent need not demonstrate that he made a contribution equal in importance to the contribution made by the listed inventors to claim his right to joint inventor status. In fact, section 116 'sets no explicit lower limit on the quantum or quality of inventive contribution required for a person to qualify as a joint inventor.'" *Eli Lilly*, 376 F.3d at 1358-59 (citations omitted). In other words, it is irrelevant that Dr. Foo may not have conceived of the entire invention claimed in the '432 patent, and it is irrelevant that Dr. Kobayashi and Mr. Shindo may have made arguably more "important" contributions to the invention of the '432 patent.³ All that Defendants need to show to prevail on this motion is that Dr. Foo ***contributed to the conception of the claimed invention.*** *Id.*; *see also Pannu v. Iolab Corp.*, 155 F.3d 1344, 1351 (Fed. Cir. 1998). Defendants have done that in their moving papers (*see* Motion at 5-9), as briefly recapped in the introduction above.

² To dispose of this case, it is sufficient to show that Dr. Foo is an unnamed joint inventor whose interest in the patent is not owned by Ricoh. *See, e.g., Ethicon, Inc. v. United States Surgical Corp.*, 145 F.3d 1456, 1468 (Fed. Cir. 1998).

³ It is further irrelevant that Dr. Foo did not mention his contribution to the invention to anyone until after this litigation was instituted — this simply is not a factor in determining inventorship. Indeed, from a fact standpoint, Dr. Foo could not have told anyone of his contribution to the '432 patent prior to this litigation, since he was unaware of the '432 patent until contacted by Ricoh's counsel around the time this litigation was filed. *Brothers Ex. 65* (Foo Tr.) at 106:14-107:12.

Indeed, Ricoh does not seriously challenge Defendants' claims that Dr. Foo contributed to the conception of the invention claimed in the '432 patent. Its only substantive argument on this issue is that Dr. Foo's work used technology independent hardware cells, not the technology *dependent* cells that Ricoh claims the '432 patent requires. *See* Opp. at 12:22-23 ("any type of 'expert system' [Dr. Foo] may have developed was simply a system for selecting technology independent functional modules."); *id.* at 16:10-14 ("These articles describe systems that use expert knowledge in the selection of technology-independent functional modules. . . . This is different from expert knowledge rules of the '432 patent that are in the selection of technology-independent [*sic*] functional modules."); *id.* at 18:20-19:2. Ricoh's argument is based on a misinterpretation of Dr. Foo's papers, which discuss storing precisely the same sort of information in the hardware cells as the '432 patent, including technology specific information.

The patent notes that four types of information are stored in the database for each cell: functional level, logic level, circuit level, and layout level, which are described in the excerpt of Column 9 below:

ing appropriate cells from the cell library. Four types of information are stored for each cell. These are:

- (1) functional level information: description of the cell at the register transfer level.
- (2) logic level information: description in terms of flip-flops and gates.
- (3) circuit level information: description at the transistor level.
- (4) Layout level information: geometrical mask level specification.

'432 patent at 9:24-34. Similar (if not identical) four types of information are stored in the FAME database. Brothers Decl., Ex. 67 at KBSC000905 ("The 'architecture,' 'logic,' 'circuit,' and 'layout' slots contain procedures to generate respective representations of the instance.").

The patent notes that the attributes of a cell include cell name, description, function, width, height, technology, delay, power, and designer.

The attributes of a cell are:

cell name
description
function
width
height
status
technology
minimum delay
typical delay
maximum delay
power
file
designer
date
comment
inspector

'432 patent at 9:35-51. These attributes (cell name (module-id), description (is_a), function, designer, version, status, technology, height & width (area), speed, power,) are stored in the FAME database, *including the technology attribute*, as shown in the middle part of Figure 1 of the paper:

Instance Doc.	designer
module-id	version
function	status

Instance Constraints	
technology	area
speed	power

Brothers Ex. 67 at KBSC000910. Indeed, the paper on FAME shows definitively that the database contains technology information — the module shown appended on page 892 of the paper identifies its technology as “nmos/2.5.” *Id.* at KBSC000907. And the paper on NEPTUNE notes that “the input file [to NEPTUNE] is a list of design specifications (bit_size, *technology*, etc.) associated with each module.” Brothers Decl., Ex. 68 at KBSC000915 (emphasis added). Additionally, Dr. Foo’s

1 Spring 1986 project proposal describes as a database as a “module (cell) library” that includes for
 2 each instance the following information:

```
3 fput(M100; is_a "flip flop"; type "edge triggered";
4     class "D"; tech "nmos 2.5"; status "tested";
5     speed 15; power 100; width 6700; height 8540;
6     inPorts "din100"; outPorts "Dql100, Dqn100";
7     clock "clk100"; powerSource "vdd100, gnd100")
```

8 where "fput" puts information into the instance frame "M100".

9 Brothers Ex. 26 at FOO 190. There simply cannot be any dispute that (a) the Foo/Kobayashi papers
 10 discuss an expert system for selecting technology *dependent* modules (cells) from a library of
 11 modules (cells) with the same attributes as those described in the '432 patent and (b) the papers
 12 discuss, at the least, a predecessor system to that disclosed in the patent specification.

13 Even if Ricoh's argument that the Foo references disclose only the use of technology
 14 independent modules were factually correct, the argument misses the point. As noted above, there is
 15 no requirement that a joint inventor meet a full element of a claim, let alone the full claim. Rather, a
 16 joint inventor “needs to perform only a part of the task which produced the invention.” *Ethicon, Inc.*
 17 *v. United States Surgical Corp.*, 135 F.3d 1456, 1460 (Fed. Cir. 1998). By Ricoh's admission, Dr.
 18 Foo's thesis and co-authored papers show that, at the very least, Dr. Foo developed an expert system
 19 that selected technology independent functional modules. This development by Dr. Foo is a large
 20 part of the “task which produced the invention,” which, according to Ricoh, differs from the final
 21 invention *only* in its use of technology dependent functional modules. Ricoh has provided no
 22 explanation why Dr. Foo's involvement in the creation of an expert system that selects technology
 23 independent modules cannot be considered a contribution to the conception of the entire invention,
 24 especially given the long-standing collaboration between Dr. Foo and Dr. Kobayashi. Moreover, the
 25 FAME paper or NEPTUNE paper standing alone show that Dr. Foo made a significant contribution to
 26 the conception of the overall invention — read together, however, there is simply no question of the
 27 importance of Dr. Foo's contribution.
 28

Further, Ricoh's opposition does not create any dispute about what Dr. Foo contributed to the articles. As noted in the opening brief, Dr. Foo and Dr. Kobayashi agreed that Dr. Kobayashi acted merely in an advisory role on both of these papers. Brothers Ex. 65 (Foo Tr.) at 9:6-10:5; Brothers Ex. 56 (Kobayashi Tr.) at 161:6-162:4, 178:12-24. Dr. Kobayashi was unable to controvert this fact at deposition, Brothers Ex. 56 (Kobayashi Tr.) at 178:16-19, and Ricoh has not provided any declaration from Dr. Kobayashi to controvert this fact now. Thus, Ricoh's assertion that "it is not clear what contribution was made by each author to the article," Opp. at 17:18 & 24-25, is simply wishful thinking on Ricoh's part. The uncontroverted testimony demonstrates that the ideas in the papers were Dr. Foo's, although certainly Dr. Kobayashi was aware of and approved the concepts, and assisted with some editing of the papers. Brothers Ex. 65 (Foo Tr.) at 9:6-10:5; Brothers Ex. 56 (Kobayashi Tr.) at 161:6-162:4, 170:24-25, 171:1-7; 178:12-24, 179:1-21.

B. Whether the '432 patent is a "unique combination" of elements found in the prior art is irrelevant for joint inventorship purposes.

In an effort to avoid the indisputable contribution Dr. Foo made to the '432 patent (and the invalidation of the '432 patent that contribution mandates), Ricoh makes the argument that the only inventive aspect of the claims of the '432 patent are that they are a "unique combination" of prior art elements. See Opp. at 11. Essentially, Ricoh is arguing that all Dr. Kobayashi and Mr. Shindo did to invent the claimed invention of the '432 patent was to mix and match pre-existing, well-known elements of others' work. Ricoh reasons that, because Dr. Foo did not contribute to this mixing and matching, he did not contribute to the conception of the invention. This argument is frivolous for several reasons.

Despite Ricoh's characterization, there is simply no indication in the patent itself that it is solely a combination of prior art elements, wherein the only inventive aspect is the unique combination of elements. Quite the contrary — the patent specification states explicitly that, to the inventors' knowledge, the claimed system originated with these inventors. See, e.g., '432 patent at 2:15-20 ("[T]he present invention, *for the first time*, opens the possibility for the design and production of ASICs by designers, engineers and technicians who may not possess the specialized

expert knowledge of a highly skilled VLSI design engineer”) (emphasis added). Moreover, the claims are not written in the *Jepson* format that is used to explicitly claim improvements on the prior art:

Where the nature of the case admits, such as in the case of an improvement, any independent claim should contain in the following order:
 (1) A preamble comprising a general description of all the elements or steps of the claimed combination which are conventional or known,
 (2) A phrase such as “wherein the improvement comprises,” and
 (3) Those elements, steps and/or relationships which constitute that portion of the claimed combination which the applicant considers as the new or improved portion.

37 C.F.R. § 1.75(e). Similarly, the patent does not disclose the prior art from which these six elements were supposedly taken, how the prior art combined these pre-existing elements, and why the particular combination hit upon by Ricoh is useful and novel. Furthermore, as the inventors only submitted four references to the PTO with their initial patent application (Brothers Decl., Ex. 39 at RCL000065) — where is all the prior art from which these six elements were allegedly taken?⁴ Thus, Ricoh’s argument that the patent is nothing more than a combination of prior art elements should be seen as what it is — a desperate attempt to prevent summary judgment.

There is additionally no legal basis for the assumption that a “combination claim” should be treated differently for joint inventorship purposes than any other claim. Patent law simply makes no distinction between “combination claims” and other types of claims. *Raytheon Co. v. Roper Corp.*, 724 F.2d 951, 961 (Fed. Cir. 1983) (“[T]he language of the 1952 Patent Act provides no basis for either classifying patents into different ‘types’ or for applying different treatment to different ‘types’ of patents.”). So, as discussed above, the standard is that a joint inventor must have contributed to the conception of the invention, which is defined by the language of the claims themselves. *Johnson & Johnston Assocs. v. R.E. Serv. Co.*, 285 F.3d 1046, 1052 (Fed. Cir. 2002) (en banc) (“Both the

⁴ It is worth noting that Ricoh, in its (misdirected) zeal to prevent summary judgment on the joint inventorship issue, has created a strong suggestion of inequitable conduct separate from the grounds alleged in Motion No. 4. Certainly, if the Foo/Kobayashi co-authored articles are part of the prior art upon which Kobayashi and Shindo built their supposed combination invention, those articles (known by Kobayashi) should have been provided to the PTO. *See generally*, Motion No. 4. But they were not. *See generally* Brothers Decl., Ex. 39 (prosecution history).

1 Supreme Court and this court have adhered to the fundamental principle that claims define the scope
2 of patent protection”) (citations omitted).

3 Ricoh’s bogeyman here is that “[i]f the Defendants’ theory was [sic] correct . . . then the
4 author of every prior art reference would be a co-inventor, even if the person never knew the named
5 inventors.” Opp. at 4:10-12. This is preposterous. As Ricoh takes pains to note in its legal section,
6 the law requires that “the alleged joint inventor asserting inventorship under 35 USC § 116, must
7 prove ‘some element of joint behavior, such as collaboration or working under common direction,
8 one inventor seeing a relevant report and building upon it or hearing another’s suggestion at a
9 meeting.’” Opp. at 10:12-14, *quoting Eli Lilly*, 376 F.3d at 1358. Ricoh does not address this legal
10 issue because there is nothing it can say to help its case — it is undisputed (and indisputable) that Dr.
11 Foo collaborated with Dr. Kobayashi on the various papers relied upon in this motion, either in an
12 advisor/advisee relationship or as a co-author. Thus, the necessary element of joint behavior is
13 unquestionably present.

14 **C. Dr. Foo’s joint inventorship is apparent from his thesis and publications.**

15 With precious few arguments to make on the law or the undisputed facts, Ricoh makes
16 unhelpful evidentiary arguments as to why the motion cannot be granted — Dr. Foo is not a credible
17 witness because he is a paid Howrey consultant, his handwritten documents are not authentic, and
18 Defendants have failed to support their motion with any expert testimony. None of these arguments
19 affects the propriety of the summary judgment evidence actually before the Court, nor does it prevent
20 the Court from drawing reasonable conclusions from this evidence.

21 First, the primary evidence relied upon to show Dr. Foo’s joint inventorship is not his
22 testimony or his notes, but rather his printed publications — his thesis and the two articles co-
23 authored with Dr. Kobayashi — in comparison with the patent. Indeed, the Court could determine
24 that Dr. Foo should have been named as a co-inventor without relying upon Dr. Foo’s deposition
25
26
27
28

1 testimony, although there is certainly no reason the Court should not consider Dr. Foo's
2 uncontroverted testimony cited in Defendants' moving papers.⁵

3 Second, it is axiomatic that the credibility of witnesses cannot be determined on summary
4 judgment. *See, e.g., Anderson v. Liberty Lobby, Inc.*, 477 U.S. 242, 255 (1986). ("Credibility
5 determinations, the weighing of the evidence, and the drawing of legitimate inferences from the facts
6 are jury functions, not those of a judge, whether he is ruling on a motion for summary judgment or for
7 a directed verdict.") Thus, in the absence of specific controverting facts (which Ricoh has failed to
8 provide), the Court should accept the testimony of Dr. Foo.

9 Third, Ricoh is the only party to have even mentioned Dr. Foo's handwritten notes, which it
10 strongly suggests are forgeries (without any evidence to back up such a staggering claim). *Opp.* at
11 16:18-20. Defendants did not introduce these notes into evidence because, although they do further
12 corroborate Dr. Foo's joint inventorship, they are not necessary for Defendants to prevail on this
13 motion. Thus, it is pure sophistry for Ricoh to claim that the mere existence of this evidence —
14 evidence that is not part of this motion — is "by itself a reason to deny this motion." *Opp.* at 16:20.

15 Finally, there is no requirement that expert testimony be provided for the Court to determine
16 this motion. *E.g., Union Carbide Corp. v. Am. Can Co.*, 724 F.2d 1567, 1573 (Fed. Cir. 1984)
17 (upholding a decision on summary judgment without expert testimony presented by the moving party
18 because "the references and appellant's invention are easily understandable without the need for
19 expert explanatory testimony"); *see also Arshal v. United States*, 223 Ct. Cl. 179, 201 (Ct. Cl. 1980)
20 ("[I]t is well established that summary judgment is permissible when the court can understand the
21 relevant technology without the aid of expert opinion."). The ultimate issue presented by this motion
22 is whether Dr. Foo's thesis and publications, combined with his multi-year collaboration with Dr.

23
24 ⁵ Ricoh has provided only attorney argument — not admissible evidence — in an attempt to controvert the testimony of
25 Dr. Foo cited in the opening brief. For instance, Ricoh dismisses Dr. Foo's testimony that he was an expert in VLSI
26 design by stating, incredulously, that "as a result of his year or so of study, he knew more about VLSI design than his
27 instructor, advisor and mentor, Dr. Kobayashi!" *Opp.* at 6:13-15. Yet, despite this attorney argument, it is uncontroverted
28 that Dr. Kobayashi lacked experience in VLSI design — even Dr. Kobayashi admitted as much. *See Brothers Ex. 23*
(Kobayashi Tr.) at 368:19-369:4. Thus, it should be no surprise that Dr. Foo knew more about VLSI design than Dr.
Kobayashi after only a "year or so of study." Once again, the facts support the Defendants' position, not the attorney
argument put forward by Ricoh.

Kobayashi, demonstrate that he contributed to the conception of any portion of the invention claimed by the '432 patent.⁶ Given the nature of this inquiry (i.e., only a contribution to a portion of the invention need be shown), and especially given the admissions made by Ricoh in its opposition (i.e., that Foo invented an expert system that used rules to select modules), Defendants suggest that the Court is well-equipped to reach the same conclusion any reasonable jury would reach, even in the absence of expert testimony on this issue⁷ — Dr. Foo contributed to the conception of the invention, and is therefore an unnamed joint inventor. As the Federal Circuit has noted in similar circumstances, “[a] trial on this issue would undoubtedly produce more argument but no more enlightenment.” *Union Carbide*, 724 F.2d at 1573.

D. There is no evidence that suggests that Dr. Foo’s work for ICC as a consultant means that ICC owned Dr. Foo’s portion of the ’432 patent.

As explained in the moving papers, should the Court determine that Dr. Foo is a joint inventor, the case would still have to be dismissed for failure to join all co-owners as plaintiffs, even if Ricoh were to successfully petition to correct inventorship.⁸ Ricoh attempts to stave off dismissal

⁶ Inventorship is a question of law. *Ethicon*, 135 F.3d at 1460. Because of this, the Court cannot accept Dr. Kobayashi’s testimony on this ultimate legal issue, quoted in footnote 4 of the Opposition. Matters of law are “inappropriate subjects for expert testimony,” let alone lay testimony. *Aguilar v. Int’l Longshoremen’s Union Local No. 10*, 966 F.2d 443, 447 (9th Cir. 1992). Moreover, Dr. Kobayashi’s testimony does not contradict either Dr. Foo’s testimony on this point or the arguments in the moving papers — Dr. Kobayashi was not specifically asked if Dr. Foo “contributed to the conception” of the ’432 patent, only whether he “contributed” to the patent, and Dr. Kobayashi also testified only that he “cannot think” that Dr. Foo made a contribution to the patent.

⁷ Ricoh has submitted the report of Defendants’ expert, Dr. Mitchell. In an attempt to sow the seeds of confusion, Ricoh repeatedly attaches undue importance to Dr. Mitchell’s statement that he could not determine the extent of Dr. Foo’s contribution to the ’432 patent. Dr. Mitchell was noting simply that, because Dr. Foo and Dr. Kobayashi collaborated over many years and are listed as co-authors on the FAME and NEPTUNE papers, he cannot determine the separate contribution of each author. Dr. Mitchell was without the benefit of Dr. Kobayashi’s testimony admitting that he acted merely as an advisor on these papers, but, in any case, such discrete identification of inventive concepts is not required to show joint inventorship (nor would it be practical). Moreover, Ricoh ignores Dr. Mitchell’s clear conclusion — immediately following the portion of the sentence Ricoh repeatedly quotes (and improperly truncates) — that states the opinion that Dr. Foo *had* contributed to the conception of the claimed invention. *See* Brothers Decl., Ex. 34 at 62 (“[T]he materials I have reviewed, together with Foo’s deposition testimony, strongly indicate Foo was a research collaborator with Kobayashi in creating the components and the overall conception of the knowledge-based approach to computer-aided design developed by Kobayashi’s group at USC by the end of December, 1986.”).

⁸ Ricoh makes a half-hearted attempt to argue that this is not the law, claiming that *Ethicon* was dismissed solely because the unnamed joint inventor signed an exclusive license with the defendant. *See* Opp. at 19:15-24. This misrepresents *Ethicon*. In *Ethicon*, the court noted that “as a matter of substantive patent law, all co-owners must ordinarily *consent* to join as plaintiffs in an infringement suit.” *Ethicon*, 135 F.3d at 1468 (emphasis added). The court therefore dismissed the case because the unnamed inventor did not consent to an infringement suit, as *evidenced* by its exclusive license. *Id.*

(Continued...)

1 with its unsupported claim that Dr. Foo was contractually obligated to assign his interest in the '432
 2 patent to ICC. Ricoh makes this argument even while acknowledging that "Mr. Foo's 20-year old
 3 signed agreement no longer exists. . . ." Opp. at 14:19. This acknowledgement is fatal, for it is
 4 Ricoh, not Defendants, which have the burden to show that an assignment of Dr. Foo's interest in the
 5 patent has occurred:

6 The general rule is that an individual owns the patent rights to the
 7 subject matter of which he is an inventor, even though he conceived it
 8 or reduced it to practice in the course of his employment. There are two
 9 exceptions to this rule: first, an employer owns an employee's invention
 10 if the employee is a party to an express contract to that effect; second,
 11 where an employee is hired to invent something or solve a particular
 12 problem, the property of the invention related to this effort may belong
 13 to the employer.

11 *Banks v. Unisys Corp.*, 228 F.3d 1357, 1359 (Fed. Cir. 2000). Thus, in order to prevent dismissal,
 12 Ricoh must show that one of the two exceptions apply, which it cannot given the admitted absence of
 13 the written contract and a lack of evidence on the scope of Dr. Foo's work for ICC.

14 Indeed, even assuming that Ricoh did not have the burden on this issue, the evidence Ricoh
 15 relies upon is insufficient to raise a question of fact given the evidence Defendants rely upon. Ricoh
 16 relies on the (inadmissible) testimony of Tooru Ozeki,⁹ who testified that all *employees* of ICC were
 17 required to sign over their patent rights to the company. *See* Brothers Ex. 24 (Ozeki Tr.) at 143:24-
 18 144:5; 148:18-149:16. But there is no evidence that Dr. Foo was an *employee* of ICC. Rather, the
 19 only evidence is that Dr. Foo was a *consultant* to ICC, a point Dr. Foo reiterated multiple times in his
 20 deposition. Brothers Ex. 65 (Foo Tr.) at 36:5-9; 71:25-72:6. Moreover, the pay stubs showing
 21 payments from ICC to various parties related to the development of the KBSC system contain *no*

22 _____
 23 (...Continued)

24 Here, there is no indication that Dr. Foo (or the University of South Carolina, the other potential co-owner of the '432
 25 patent) has consented to a suit against the Defendants. Moreover, even if they did so consent, unless all co-owners are
 26 joined voluntarily at the **commencement** of litigation, the case must be dismissed. *See Hurd v. Sheffield Steel Corp.*, 181
 27 F.2d 269, 271 (8th Cir. 1950) (affirming dismissal of lawsuit where all patent co-owners had not been joined when
 28 litigation began). The simple fact that there is a co-owner of the '432 patent who is not named as a party to this litigation
 means that this case must be dismissed.

⁹ Mr. Ozeki's testimony regarding this issue is not based on personal knowledge and is hearsay, and is therefore
 inadmissible.

1 payments whatsoever to Dr. Foo.¹⁰ Brothers Decl., Ex. 71. Thus, Mr. Ozeki's testimony that all
 2 employees were required to sign over their patent rights does not imply that Dr. Foo, a consultant,
 3 was required to do the same. In fact, Dr. Foo testified that he never signed any agreement with ICC
 4 regarding patent rights or any other issue, which is the only admissible testimony on this issue.
 5 Brothers Ex. 65 (Foo Tr.) at 47:23-48:20.

6 Given that Ricoh cannot show that Dr. Foo assigned his rights in the '432 patent to ICC, there
 7 is a co-owner of the patent who is not a party to this case. Under the reasoning of *Ethicon*, the case
 8 must be dismissed for failure to join all co-owners of the patent.

9 **III. CONCLUSION**

10 Ricoh's opposition to this motion is much ado about nothing. Ricoh complains that
 11 Defendants have failed to prove that Dr. Foo invented the whole invention claimed by the '432
 12 patent, but this is not the legal standard (as Ricoh knows). Ricoh complains that Dr. Foo did not
 13 contribute to the invention, which Ricoh claims is a mere combination; but there is nothing in the law
 14 that allows "combination claims" to be treated differently from any other claim for purposes of
 15 determining inventorship. Ricoh complains that Dr. Foo's testimony is not credible and his
 16 handwritten documents (not even relied upon by Defendants) are not authentic, but it cannot argue
 17 credibility on summary judgment (at least not without putting in contradictory facts, which it does not
 18 do). Ricoh complains that there is contradictory expert testimony, but Defendants have not relied on
 19 any expert testimony and Ricoh's (opinion) testimony is contradicted by (factual) documents.
 20 Finally, Ricoh complains that Dr. Foo's interest in the patent is owned by ICC, but has absolutely no
 21 evidence to support that assertion. In the end, Defendants' evidence is uncontroverted, and Ricoh is
 22 left either with an invalid patent, or with a co-owner it has not joined in this case. Either way, the
 23 case should be dismissed.

24 Dated: September 8, 2006

HOWREY LLP

25 By: /s/
 26 Denise M. De Mory

27 ¹⁰ In contrast, the paystubs confirm that Mr. Ozeki was an employee, with indications that he was on "payroll" and that
 28 taxes were withheld from his payments. See Brothers Decl., Ex. 71 at KBSC00002159, 2203, and 2639.

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